

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 51. (cancelled)

52. (currently amended) A method of cutting metal comprising:

providing a cutting torch with a two part tip;

positioning said cutting torch substantially perpendicular to said metal;

heating a local area of said metal with said cutting torch positioned substantially perpendicular to said metal until said metal in said local area becomes molten;

re-positioning the cutting torch with respect to said metal to cut said metal;

said re-positioning step comprising orienting said cutting torch at an angle of incidence with respect to said metal;

fueling the torch with a combustible gas and oxygen from a liquid oxygen source during said local area heating and cutting of said metal,

wherein said fueling step comprises delivering said combustible gas ~~is delivered~~ to said cutting torch at a

pressure between about ~~15~~ 35 and 80 psi, ~~and forming a cut~~
~~in the metal.~~

53. (currently amended) The method of claim 52, ~~wherein~~
further comprising selecting said combustible gas is
~~selected~~ from the group consisting of propane, chemtane,
propylene, MAPP, and natural gas.

54. (currently amended) ~~The~~ A method of ~~claim 52,~~ cutting
metal comprising:

providing a cutting torch with a two part tip;

positioning the cutting torch to cut metal;

preheating the metal;

fueling the torch with a combustible gas and oxygen
from a liquid oxygen source, wherein said combustible gas
is delivered to said cutting torch at a pressure between
about 35 and 80 psi and wherein said combustible gas is
selected from the group consisting of propane, chemtane,
propylene, and natural gas; and

forming a cut in the metal.

55. (cancelled)

56. (currently amended) The method of claim 52, wherein said ~~metal is~~ local are heating step comprises heating a local area of a steel structure.

57. (previously presented) The method of claim 52, further comprising cutting the metal at a rate of at least 3 feet per minute.

58. (currently amended) The method of claim 52, ~~further comprising~~ wherein said re-positioning step comprises directing said fueled torch to said metal at an angle of incidence of at least 45 degrees.

59. (currently amended) A metal cutting ~~apparatus~~ system comprising:

a combustible gas selected from a group consisting of propane, chemtane, propylene, MAPP, and natural gas;

a hand-held, movable cutting torch with a two part tip;

~~said apparatus being characterized to support~~ means for delivering said combustible gas to said cutting torch at a pressure between about 35 and 80 psi;

~~a regulator;~~

~~lines;~~

a heater;

a source of liquid oxygen, wherein said liquid oxygen from said source is passed through said heater to said cutting torch ~~characterized to support presence of~~ so that oxygen gas is delivered to said cutting torch at a pressure of at least about 150 psi, ~~wherein said lines are free from frozen material~~; and

said cutting torch being equipped with means for altering a flow of said oxygen gas dependent upon operator need.

60 - 63. (cancelled)

64. (currently amended) A method for cutting metal comprising:

positioning a two part tip cutting torch ~~relative~~ substantially perpendicular to a surface of said metal being cut;

preheating a local area of said metal while said cutting torch is positioned substantially perpendicular to said surface;

providing a combustible gas, ~~wherein said combustible gas is~~ selected from the group consisting of propane,

chemtane, propylene, MAPP, and natural gas and oxygen to
said cutting torch;

~~employing~~ said oxygen providing step comprising
setting an oxygen pressure of at least 150 psi;
~~removing molten metal at an angle of reflection;~~
re-positioning said cutting torch relative to said
surface so that said cutting torch is at an angle of
incidence with respect to said surface and forming a
cutting trench wherein said molten metal is removed at an
angle of reflection with respect to said surface and on the
same side of said surface as said cutting torch; and
moving the cutting torch relative to a cut in said
metal surface.

65. (cancelled)

66. (previously presented) The method of claim 64, further
comprising cutting part of the metal at a rate of at least
3 feet per minute.

67. (cancelled)

68. (currently amended) The method of claim 64, ~~wherein~~
~~said combustible gas is delivered~~ further comprising

delivering said combustible gas to said cutting torch at a pressure of about 35 to about 80 psi.

69 - 71. (cancelled)

72. (currently amended) A method of cutting metal comprising:

- providing a cutting torch with a two part tip;
- positioning the cutting torch to cut metal;
- preheating the metal;
- fueling the torch with a combustible gas and oxygen from a liquid oxygen source, wherein said combustible gas is provided to said cutting torch at a pressure between about ~~45~~ 35 and 80 psi and wherein said combustible gas is selected from the group consisting of propane, chemtane, propylene, and natural gas; and
- cutting the metal at a rate of at least 24 inches per minute.

73 - 75. (cancelled)

76. (currently amended) A method of cutting metal comprising:

- providing a cutting torch with a two part tip;

positioning the cutting torch to cut metal;

preheating the metal;

fueling the torch with a combustible gas and oxygen from a liquid oxygen source, wherein said combustible gas is delivered to said cutting torch at a pressure between about 15 and 80 psi and wherein said combustible gas is selected from the group consisting of propane, chemtane, propylene, and natural gas; and

cutting the metal at a rate of at least 5 feet per minute.

77 - 79. (cancelled)

80. (new) The system of claim 59, wherein said liquid oxygen source comprises dual liquid oxygen sources connected in parallel.

81. (new) The system of claim 59, wherein said cutting torch with said two part tip varies in size from a number 6 to a number 10 size tip.

82. (new) The system of claim 59, wherein said altering means comprises an easy-on air lance.

83. (new) The method of claim 64, wherein said cutting trench forming step comprises forming a cutting trench with a leading edge taking an approximate shape of a line of excavation.

84. (new) The method of claim 64, wherein said cutting trench forming step comprising forming a cutting trench with an arcuately shaped leading edge.

85. (new) The method of claim 64, wherein said moving step comprises moving said cutting torch generally parallel to said surface and thereby heating the metal in a direction of the cut and pushing the molten metal out of said cutting trench along a line of excavation.

86. (new) The method of claim 85, further comprising continuing said cut at a rate which ensures the metal along the line of excavation is heated to molten temperatures.

87. (new) The method of claim 64, wherein said cutting torch re-positioning step comprises rotating a head of the cutting torch about a fixed point.